

**Docket No.: PF-0221-2 DIV**

1. An isolated polypeptide selected from the group consisting of:
  - a) a polypeptide comprising the amino acid sequence of SEQ ID NO:1,
  - b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:1,
  - c) a biologically active fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1, and
  - d) an immunogenic fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1.

11. An isolated antibody which specifically binds to a polypeptide selected from the group consisting of:

- a) a polypeptide comprising the amino acid sequence of SEQ ID NO:1,
- b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:1,
- c) a biologically active fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1, and
- d) an immunogenic fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1.

12. An isolated polynucleotide selected from the group consisting of:

- a) a polynucleotide comprising the polynucleotide sequence of SEQ ID NO:2,
- b) a polynucleotide comprising a naturally occurring polynucleotide sequence at least 90% identical to the polynucleotide sequence of SEQ ID NO:2,
- c) a polynucleotide complementary to a polynucleotide of a),
- d) a polynucleotide complementary to a polynucleotide of b), and
- e) an RNA equivalent of a)-d).

30. A diagnostic test for a condition or disease associated with the expression of NAPTR in a biological sample, the method comprising:

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- a) combining the biological sample with an antibody of claim 11, under conditions suitable for the antibody to bind the polypeptide and form an antibody:polypeptide complex, and
- b) detecting the complex, wherein the presence of the complex correlates with the presence of the polypeptide in the biological sample.

31. The antibody of claim 11, wherein the antibody is:

- a) a chimeric antibody,
- b) a single chain antibody,
- c) a Fab fragment,
- d) a F(ab')<sub>2</sub> fragment, or
- e) a humanized antibody.

32. A composition comprising an antibody of claim 11 and an acceptable excipient.

33. A method of diagnosing a condition or disease associated with the expression of NAPTR in a subject, comprising administering to said subject an effective amount of the composition of claim 32.

34. A composition of claim 32, wherein the antibody is labeled.

35. A method of diagnosing a condition or disease associated with the expression of NAPTR in a subject, comprising administering to said subject an effective amount of the composition of claim 34.

36. A method of preparing a polyclonal antibody with the specificity of the antibody of claim 11, the method comprising:

- a) immunizing an animal with a polypeptide having the amino acid sequence of SEQ ID NO:1, or an immunogenic fragment thereof, under conditions to elicit an antibody response,
- b) isolating antibodies from said animal, and

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- c) screening the isolated antibodies with the polypeptide, thereby identifying a polyclonal antibody which binds specifically to a polypeptide having the amino acid sequence of SEQ ID NO:1.
37. A polyclonal antibody produced by a method of claim 36.
38. A composition comprising the polyclonal antibody of claim 37 and a suitable carrier.
39. A method of making a monoclonal antibody with the specificity of the antibody of claim 11, the method comprising:
- a) immunizing an animal with a polypeptide having the amino acid sequence of SEQ ID NO:1, or an immunogenic fragment thereof, under conditions to elicit an antibody response,
  - b) isolating antibody producing cells from the animal,
  - c) fusing the antibody producing cells with immortalized cells to form monoclonal antibody-producing hybridoma cells,
  - d) culturing the hybridoma cells, and
  - e) isolating from the culture monoclonal antibody which binds specifically to a polypeptide having the amino acid sequence of SEQ ID NO:1.
40. A monoclonal antibody produced by a method of claim 39.
41. A composition comprising the monoclonal antibody of claim 40 and a suitable carrier.
42. The antibody of claim 11, wherein the antibody is produced by screening a Fab expression library.
43. The antibody of claim 11, wherein the antibody is produced by screening a recombinant immunoglobulin library.

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44. A method of detecting a polypeptide having the amino acid sequence of SEQ ID NO:1 in a sample, the method comprising:

- a) incubating the antibody of claim 11 with a sample under conditions to allow specific binding of the antibody and the polypeptide, and
- b) detecting specific binding, wherein specific binding indicates the presence of a polypeptide having the amino acid sequence of SEQ ID NO:1 in the sample.

45. A method of purifying a polypeptide having the amino acid sequence of SEQ ID NO:1 from a sample, the method comprising:

- a) incubating the antibody of claim 11 with a sample under conditions to allow specific binding of the antibody and the polypeptide, and
- b) separating the antibody from the sample and obtaining the purified polypeptide having the amino acid sequence of SEQ ID NO:1.

56. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:1.